

REMARKS

The application has been amended and is believed to be in condition for allowance.

New claims have been added. The previous claims have not been amended.

Claims 1-4 and 8-10 stand rejected as obvious over JAKOBSON et al. 4,508,058 in view of BOEN et al. 5,463,567.

Claims 5-7 stand rejected in further view of WO 96/36212 to INNINGS et al.

As per the last Appeal Brief, Figure 1 illustrates a robot (6) with arm (8) that moves animal related devices (12a-milking equipment) toward an animal (cow), for performing an operation associated with the animal and the installed animal related device (milking).

The invention provides for improved maintenance of such a system by associating with the animal, the animal related device, and the robot: 1) a registering means (20a) and 2) a control means.

The registering means accumulates a running value. The control means generates a signal when a predetermined threshold value of the running value is reached.

The predetermined threshold value is set for each animal related device, the driving means of the robot, and a complete animal related operation.

Correspondingly, the registering means may register the running value of: 1) each animal related device, 2) the driving means of the robot, and 3) the running time of the complete animal related operation. See claims 2-4.

For example, the animal related device may be a milking pulsator, the registering means tracks the pulsator running time, and the control means signals when the pulsator reaches its predetermined cumulative running time. Alternatively, the running value could be the number of pulsations generated by the pulsator. See claims 5-7.

Other recited examples are the running time of a teat location device (claim 8), the running time of a teat cleaning device (claim 9), and running time of a gate operator (claim 10).

Accurate monitoring of running values and timely signaling when reaching a threshold value allows for efficient maintenance of equipment or completion of a task when monitoring the running time of an animal operation.

The new claims recite the invention in alternative language. Consider claim 11, which recites a registering means provided for automatically registering a cumulative operating running value of each of said at least one animal related device, said robot, and said animal related operation, wherein, said control means is adapted to generate a maintenance-need signal when reaching a predetermined threshold value corresponding to each of i) said cumulative running value of said at least one

animal related device, ii) said cumulative running value of said robot, and iii) said cumulative running value of said device used in said animal related operation, so that said signal is automatically generated by said control means upon said registering means registering each of said cumulative running values reaching said corresponding predetermined threshold values.

Claim 12 is broader.

Analysis of the Applied Art

JAKOBSON et al. is offered as teaching of calculating the time since a cow was last milked, and for a control means that, when sufficient time has elapsed, activates the milking equipment to again milk the cow using a robot (referring to Column 3, lines 28-36).

The claims' recitations do not read on this disclosure. The elapsed time measuring system of JAKOBSON et al. does not meet the recitations of the registering means. E.g., claim 1 recites "a registering means (20a, 20b,...,20g) is provided for registering a cumulative running value;".

But the amount of time NOT milking a cow is not "a cumulative running value" (claim 1) or "a cumulative operating running value" (claims 11-12).

In contrast to JAKOBSON, the invention provides for improved maintenance of a system by using a registering means to accumulate a running value--how much operational use something

has accumulated--to trigger a control means to generate a signal when a predetermined threshold value of the running value is reached.

Although JAKOBSON et al. does teach improving cow milking, JAKOBSON et al. does not teach how to improve maintenance of such milking equipment as recited in the rejected claims. Nor would modification of JAKOBSON et al. be obvious in view of the secondary references. Thus, the rejections fail.

BOEN has been offered as disclosing "establishing a predetermined threshold value for each machinery component" (abstract lines 6-7, column 1, lines 11-19, 29, and 35-38).

Applicant respectfully disagrees.

BOEN teaches providing historical operational data based on (categorized by) operating conditions so that equipment can be evaluated based on data relating to different operating conditions. See Abstract lines 1-3. BOEN also teaches how to measure operational data and then select data based on operating parameters (operating conditions).

The offered passages in column 1 relate to making such measurements but is not seen to teach establishing predetermined threshold values based on equipment running values. Nor is there any teaching specific to the field of the present invention, i.e., an animal related apparatus comprising a robot for performing an animal related operation with at least one animal related device.

Thus, the combination of JAKOBSON and BOEN fails to teach the present invention as recited by the independent claims.

The further application of INNINGS fails to render obvious the present invention. INNINGS discloses a pulsator, a teatcup with movement sensor, and an alarm to signal a malfunction in response to the sensor sensing a movement of the teatcup liner.

But INNINGS teaches an alarm to signal a malfunction in response to the sensor sensing an abrupt movement of the teatcup liner when the teatcup liner moves to an open or closed position. Further, see the Abstract disclosing that "[i]f the sensed movement *does not fulfill a predetermined condition*, a malfunction is signaled."

The teaching of INNINGS is exactly opposite to that recited. That is, claim 1 recites "to generate a signal when a predetermined threshold value has been reached" whereas INNINGS et al. teach to signal if the predetermined condition is not fulfilled.

Further, the alarm is not related to the running value of the pulsator (claim 5), e.g., the running time of the pulsator (claim 6), or the number of pulsations generated (claim 7).

There is no disclosure as to a "control means being adapted to register the cumulative running time value of said pulsator" per claim 5.

INNINGS et al. fail to teach all the recitations of claims 5-7 which are acknowledged to be missing from JAKOBSON et al. Accordingly, the combination fails to render obvious these claims.

Applicant believes that, because the claims are being viewed as broad, the present disclosure itself is effectively being used to render the claimed invention obvious. Such an approach is not permitted.

Relevant to this point, the Federal Circuit has emphasized in July, 1998 that "[m]ost, if not all, inventions are combinations and mostly of old elements." *In re Rouffett*, 47 USPQ 2d 1453, 1457 citing to *Richdel, Inc. v. Sunspool Corp.*, 219 USPQ 8, 12 (Fed. Cir. 1983). The Federal Circuit continued by noting that "rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blue print for piecing together elements in the prior art to defeat the patentability of the claimed invention."

Thus, the Federal Circuit requires that in order to prevent the use of such hindsight, the Official Action must "show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." (*In re Rouffett* at 1458).

As stated by MPEP §706.02(j), to establish a *prima facie* case of obviousness the Official Action must first, consider the relevant teachings of the prior art, and after determining the differences between the pending claim and the prior art teachings, second, propose modifications of the prior art necessary to arrive at the claimed subject matter, explaining the motivation for combining the particular references and making the proposed modifications to those references. Thus, there must be motivation to modify the references and a teaching or suggestion of **all** the claim recitations.

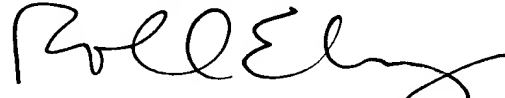
The present rejections do not satisfy these tests and are therefore not believed to be viable.

In view of the above, applicant believes that the present application is in condition for allowance and an early indication of the same is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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